

CLAIMS

1. A method of processing data in a computer system comprising at least one host and at least one storage system, the method comprising acts of:

(A) sending to the at least one storage system, from the at least one host, a request to store a unit of data, the request including a retention period for the unit of data;

(B) after expiration of at least some of the retention period, determining if a specified event has occurred;

(C) when it is determined in the act (B) that the specified event has not occurred, extending the retention period for the unit of data; and

(D) repeating the acts (B) and (C) until it is determined in the act (B) that the specified event has occurred.

2. The method of claim 1, wherein the method is for retaining the unit of data for a specified period after the occurrence of an event, and wherein the method further comprises an act of:

(E) when it is determined in the act (B) that the specified event has occurred, extending the retention period for the unit of data for a length of time associated with the specified period after the occurrence of the event.

3. The method of claim 1, wherein the method is for retaining the unit of data for a specified period after the occurrence of an event, and wherein the method further comprises an act of:

(E) when it is determined in the act (B) that the specified event has occurred, extending the retention period for the unit of data so that the retention period expires the specified period after the occurrence of the event.

4. The method of claim 2, wherein the act (C) further comprises an act of:

(C1) extending the retention period for the unit of data for an extended period that is less than or equal to the specified period for the unit of data to be retained after the occurrence of the event.

5. The method of claim 4, wherein the act (D) comprises an act of, each time the act (C) is performed, extending the retention period by a same length of time.

6. The method of claim 1, wherein the at least one storage system stores at least two different types of units of data including a blob of data and a content descriptor file (CDF), each blob having at least one corresponding CDF that includes metadata relating to the blob, wherein a retention period of a blob is the retention period of its corresponding at least one CDF, wherein the unit of data is a blob, wherein the act (A) comprises establishing the retention period in a first CDF that corresponds to the blob, and wherein the act (C) further comprises:

creating a second CDF that corresponds to the blob and has a retention period that expires after the retention period of the first CDF.

7. A method of ensuring that a unit of data, stored on a computer system, is retained until a specified period after the occurrence of an event, the computer system comprising at least one host and at least one storage system that stores the unit of data, the method comprising acts of:

(A) establishing an initial retention period for the unit of data, wherein the initial retention period is less than or equal to the specified period;

(B) after the expiration of at least some of the initial retention period, determining whether the specified event has occurred;

(C) when it is determined in the act (B) that the specified event has not occurred, performing acts of:

(C1) extending the retention period for the unit of data for an extended period that is less than or equal to the specified period; and

(C2) after the expiration of at least some of the extended retention period, determining whether the specified event has occurred and when the specified event has not occurred, returning to the act (C1), and when the specified event has occurred, proceeding to the act (D); and

(D) when it is determined in either of the acts (B) or (C2) that the specified event has occurred at a time, extending the retention period so that the retention period expires the specified period after the time at which the event occurred.

8. At least one computer readable medium encoded with instructions that, when executed on a computer system perform a method of processing data, the computer system comprising at least one host and at least one storage system, the method comprising acts of:

(A) sending to the at least one storage system, from the at least one host, a request to store a unit of data, the request including a retention period for the unit of data;

(B) after expiration of at least some of the retention period, determining if a specified event has occurred;

(C) when it is determined in the act (B) that the specified event has not occurred, extending the retention period for the unit of data; and

(D) repeating the acts (B) and (C) until it is determined in the act (B) that the specified event has occurred.

9. The at least one computer readable medium of claim 8, wherein the method is for retaining the unit of data for a specified period after the occurrence of an event, and wherein the method further comprises an act of:

(E) when it is determined in the act (B) that the specified event has occurred, extending the retention period for the unit of data for a length of time associated with the specified period after the occurrence of the event.

10. The at least one computer readable medium of claim 8, wherein the method is for retaining the unit of data for a specified period after the occurrence of an event, and wherein the method further comprises an act of:

(E) when it is determined in the act (B) that the specified event has occurred, extending the retention period for the unit of data so that the retention period expires the specified period after the occurrence of the event.

11. The at least one computer readable medium of claim 9, wherein the act (C) further comprises an act of:

(C1) extending the retention period for the unit of data for an extended period that is less than or equal to the specified period for the unit of data to be retained after the occurrence of the event.

12. The at least one computer readable medium of claim 11, wherein the act (D) comprises an act of, each time the act (C) is performed, extending the retention period by a same length of time.

13. The at least one computer readable medium of claim 8, wherein the at least one storage system stores at least two different types of units of data including a blob of data and a content descriptor file (CDF), each blob having at least one corresponding CDF that includes metadata relating to the blob, wherein a retention period of a blob is the retention period of its corresponding at least one CDF, wherein the unit of data is a blob, wherein the act (A) comprises establishing the retention period in a first CDF that corresponds to the blob, and wherein the act (C) further comprises:

creating a second CDF that corresponds to the blob and has a retention period that expires after the retention period of the first CDF.

14. At least one computer readable medium encoded with instructions that, when executed on a computer system perform a method of ensuring that a unit of data, stored on the computer system, is retained until a specified period after the occurrence of an event, the computer system comprising at least one host and at least one storage system that stores the unit of data, the method comprising acts of:

(A) establishing an initial retention period for the unit of data, wherein the initial retention period is less than or equal to the specified period;

(B) after the expiration of at least some of the initial retention period, determining whether the specified event has occurred;

(C) when it is determined in the act (B) that the specified event has not occurred, performing acts of:

(C1) extending the retention period for the unit of data for an extended period that is less than or equal to the specified period; and

(C2) after the expiration of at least some of the extended retention period, determining whether the specified event has occurred and when the specified event has not occurred, returning to the act (C1), and when the specified event has occurred, proceeding to the act (D); and

(D) when it is determined in either of the acts (B) or (C2) that the specified event has occurred at a time, extending the retention period so that the retention period expires the specified period after the time at which the event occurred.

15. A host computer for use in a computer system that includes the host computer and at least one storage system, the host computer comprising:

first means for sending to the at least one storage system, a request to store a unit of data, the request including a retention period for the unit of data;

second means for determining, after expiration of at least some of the retention period, if a specified event has occurred;

third means for extending the retention period for the unit of data when it is determined that the specified event has not occurred; and

fourth means for repeatedly instructing the second and third means to determine whether the specified event has occurred and for extending the retention period until it is determined that the specified event has occurred.

16. The host computer of claim 15, wherein the at least one storage system retains the unit of data for a specified period after the occurrence of an event, and the host computer further comprises:

means for extending the retention period for the unit of data for a length of time associated with the specified period after the occurrence of the event, when it is determined that the specified event has occurred.

17. The host computer of claim 15, wherein the at least one storage system retains the unit of data for a specified period after the occurrence of an event, and the host computer further comprises:

means for extending the retention period for the unit of data so that the retention period expires the specified period after the occurrence of the event, when it is determined that the specified event has occurred.

18. The host computer of claim 16, further comprising:

means for extending the retention period for the unit of data for an extended period that is less than or equal to the specified period for the unit of data to be retained after the occurrence of the event.

19. The host computer of claim 18, further comprising means for extending the retention period by a same length each time the retention period is extended for the unit of data by the third means.

20. The host computer of claim 5, wherein the at least one storage system stores at least two different types of units of data including a blob of data and a content descriptor file (CDF), each blob having at least one corresponding CDF that includes metadata relating to the blob, wherein a retention period of a blob is the retention period of its corresponding at least one CDF, wherein the unit of data is a blob, wherein the means for sending the request to store the unit of data further comprise means for establishing the retention period in a first CDF that corresponds to the blob, and wherein the means for extending the retention period for the unit of data further comprises:

means for creating a second CDF that corresponds to the blob and has a retention period that expires after the retention period of the first CDF.

21. The host computer of claim 15, in combination with the at least one storage system.